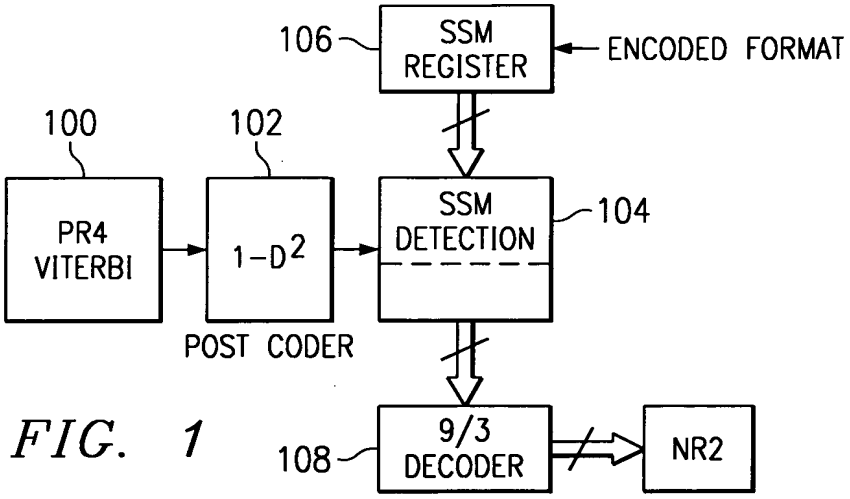

FIG. 1

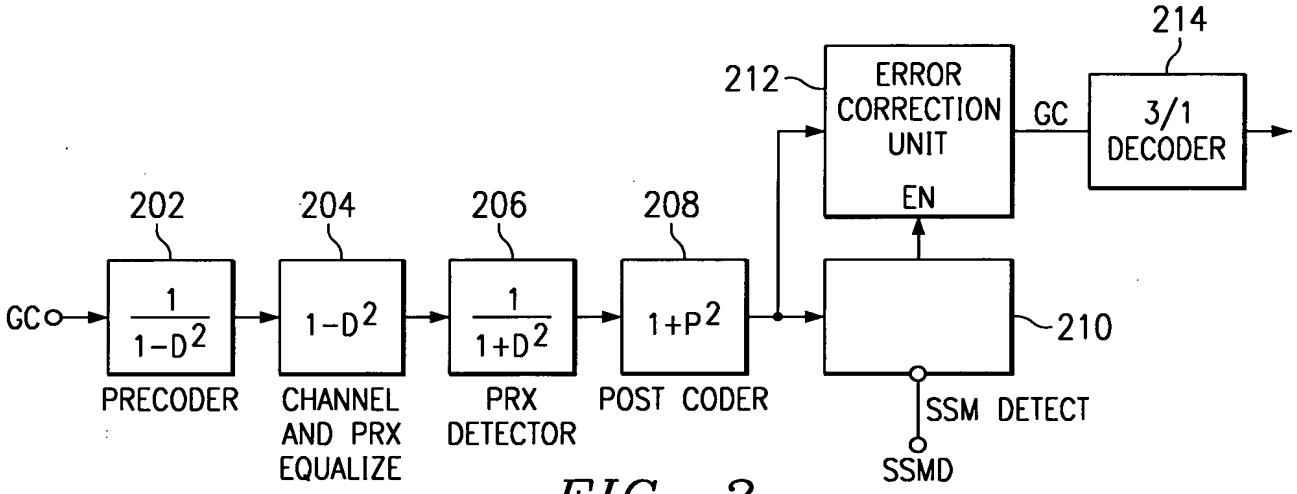

FIG. 2

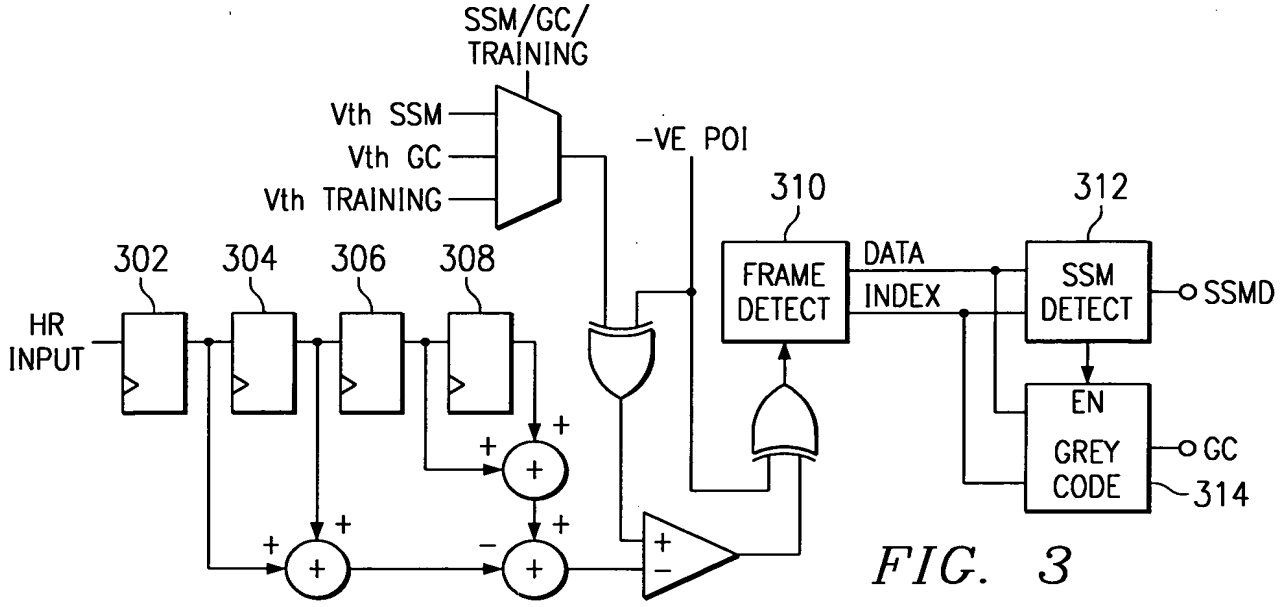

FIG. 3

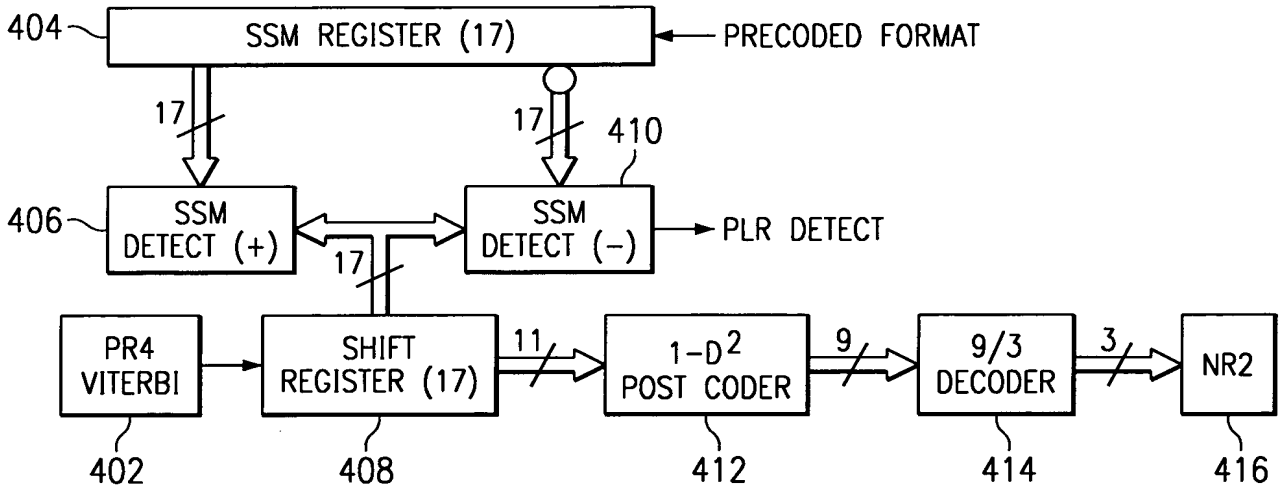

FIG. 4

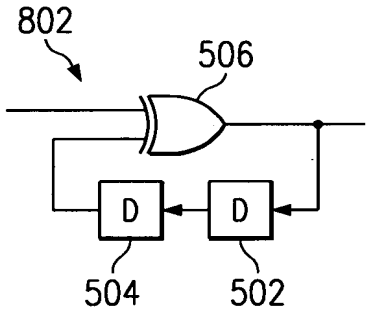

FIG. 5

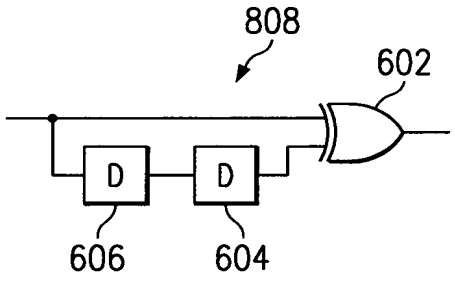

FIG. 6

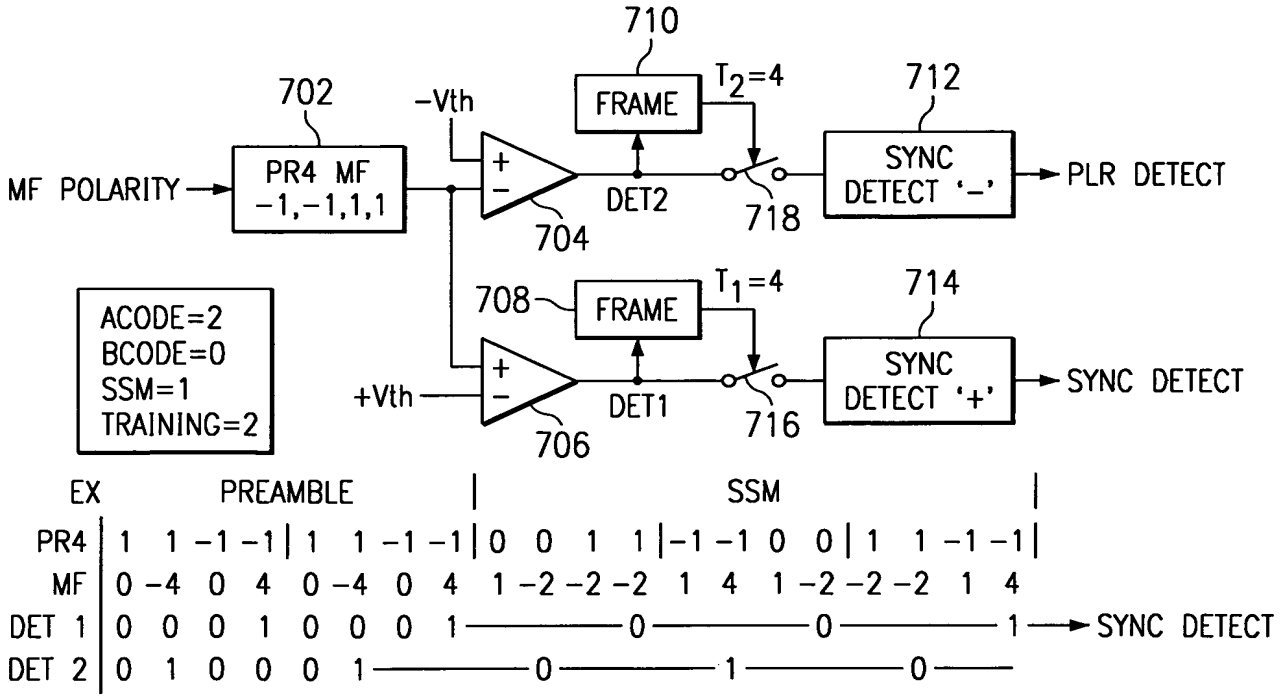

FIG. 7

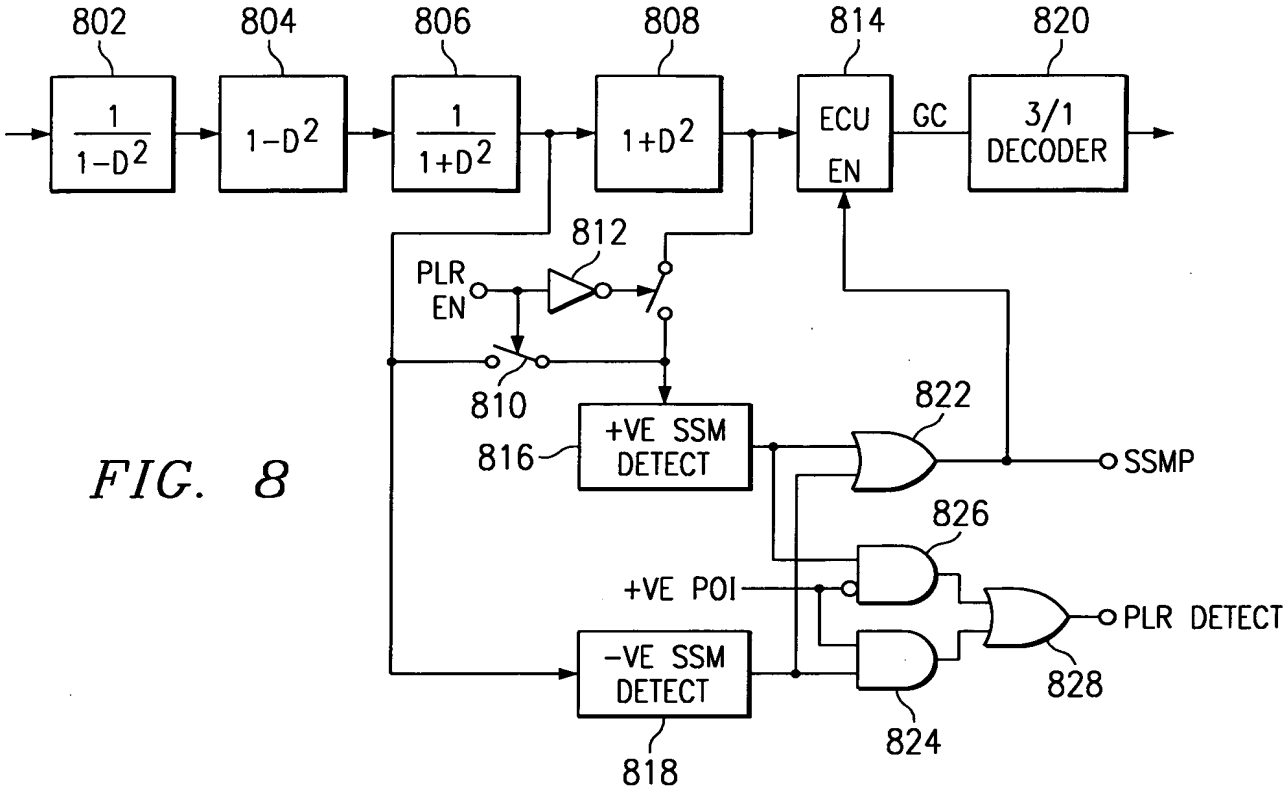
802
804
806
808
814
820
1/(1-D^2)
1-D^2
1/(1+D^2)
1+D^2
ECU EN
GC
3/1 DECODER
812
PLR EN
810
+VE SSM DETECT
816
822
SSMP
826
+VE POI
PLR DETECT
-VE SSM DETECT
828
824
818

FIG. 8

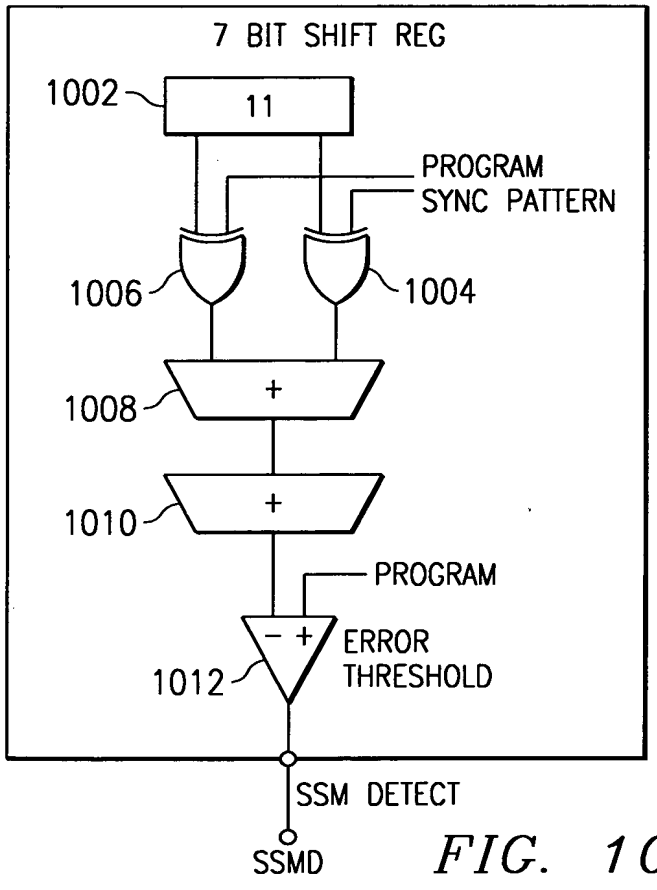
7 BIT SHIFT REG
1002
11
PROGRAM SYNC PATTERN
1006
1004
1008
+
1010
+
PROGRAM
ERROR THRESHOLD
1012
SSM DETECT
SSMD

FIG. 10

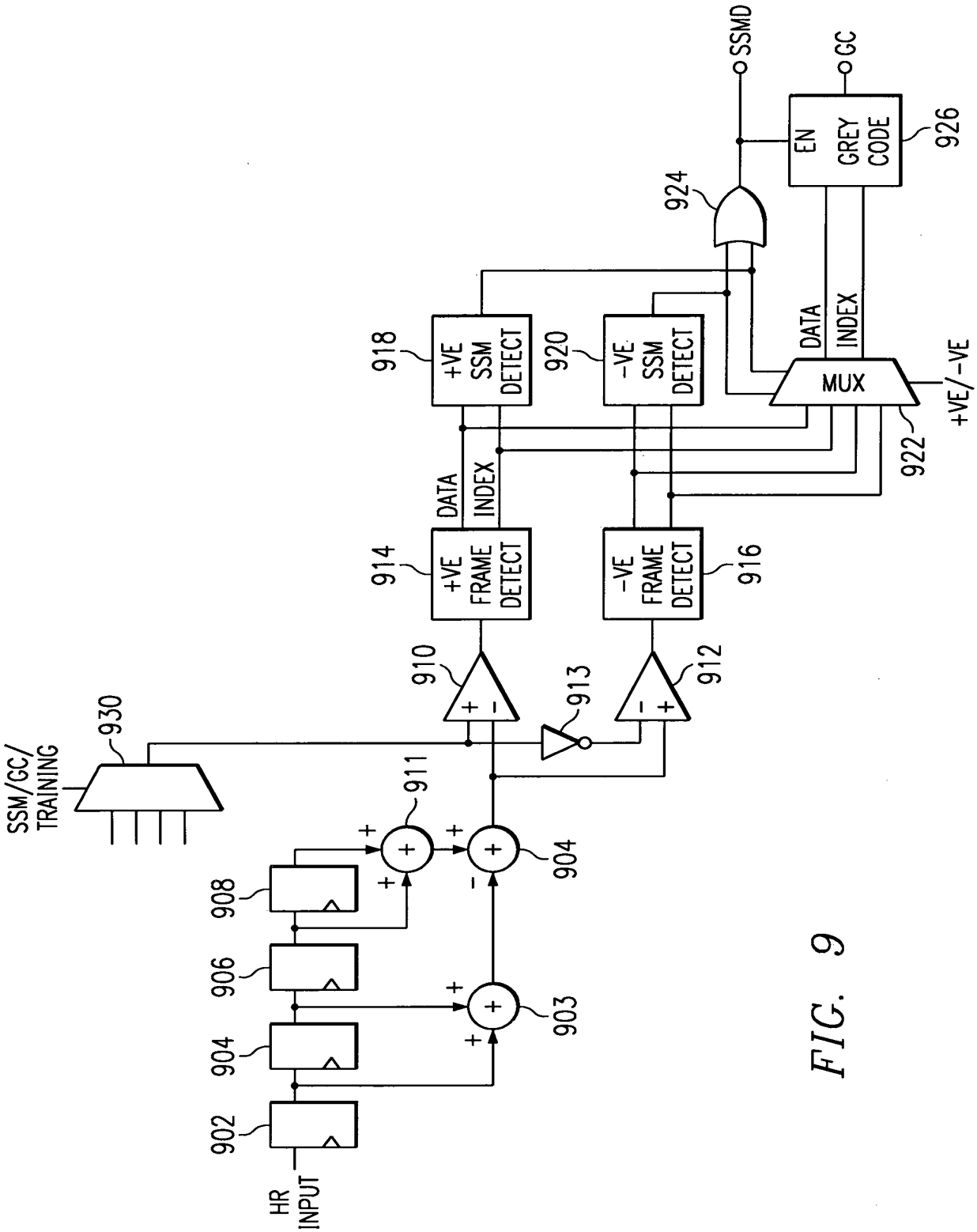
HR INPUT
902
904
906
908
903
904
911
910
912
913
914
916
918
920
922
924
926
930
+VE FRAME DETECT
-VE FRAME DETECT
+VE SSM DETECT
-VE SSM DETECT
DATA
INDEX
MUX
+VE/-VE
EN GREY CODE
SSMD
GC
SSM/GC/ TRAINING

FIG. 9

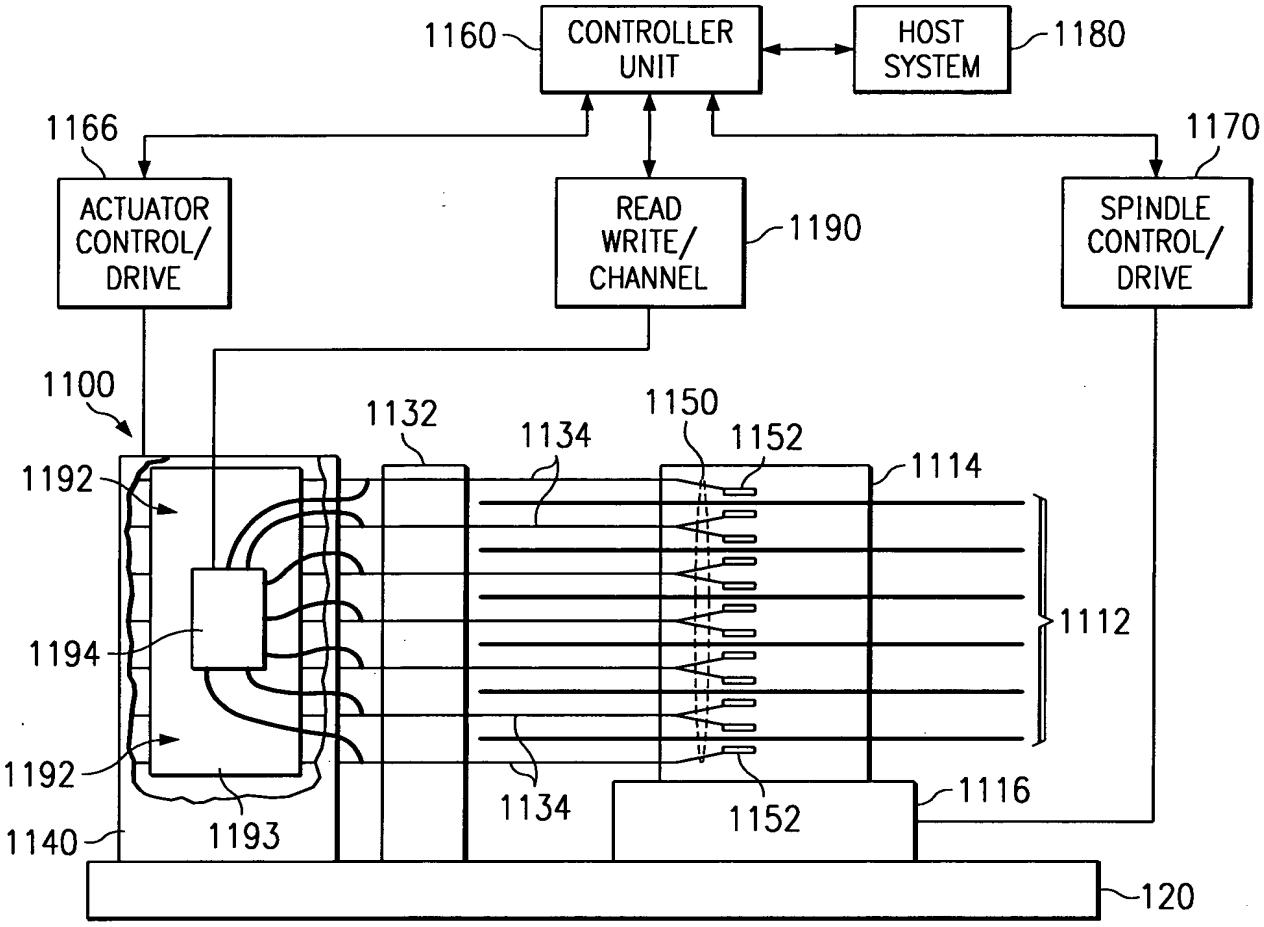
1160
CONTROLLER UNIT
HOST SYSTEM
1180
1166
1170
ACTUATOR CONTROL/ DRIVE
READ WRITE/ CHANNEL
1190
SPINDLE CONTROL/ DRIVE
1100
1132
1134
1150
1152
1114
1192
1194
1112
1192
1134
1152
1116
1140
1193
120

FIG. 11

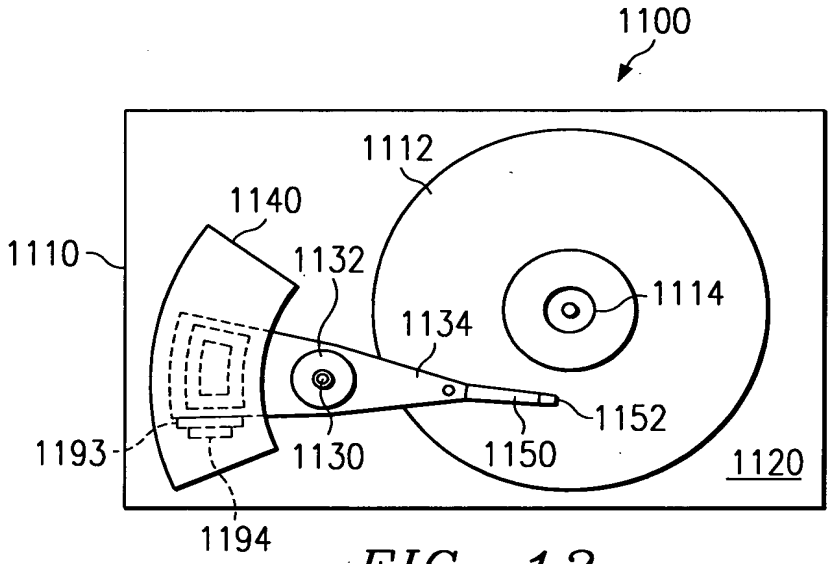
1100
1112
1140
1110
1132
1114
1134
1152
1193
1130
1150
1120
1194

FIG. 12